

GAO

Report to the Subcommittee on  
Readiness and Management Support,  
Committee on Armed Services, U.S.  
Senate

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September 2005

# DEFENSE MANAGEMENT

## DOD Needs to Demonstrate That Performance-Based Logistics Contracts Are Achieving Expected Benefits



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## Why GAO Did This Study

The Department of Defense (DOD) contracts with private sector companies to perform depot maintenance of weapon systems using performance-based logistics—that is, purchasing a defined level of performance over a defined time period at a fixed cost to the government. After implementing such contracts, program offices are to validate their efficacy using cost and performance data; DOD cannot otherwise ensure cost savings and improved performance are being achieved through the use of performance-based logistics. GAO was asked to review the implementation of performance-based logistics to determine whether DOD could demonstrate cost savings and improved responsiveness from these arrangements. In conducting its review, GAO analyzed the implementation of performance-based logistics arrangements for 15 weapon system programs.

## What GAO Recommends

GAO recommended that DOD, to demonstrate whether performance-based logistics contracts are resulting in reduced costs and increased performance, develop procedures to track whether program offices validate their business case decisions and verify the reliability of contractor cost and performance data. DOD concurred with GAO's recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-05-966](http://www.gao.gov/cgi-bin/getrpt?GAO-05-966).

To view the full product, including the scope and methodology, click on the link above. For more information, contact William Solis at (202) 512-8412 or [solisw@gao.gov](mailto:solisw@gao.gov).

## DEFENSE MANAGEMENT

# DOD Needs to Demonstrate That Performance-Based Logistics Contracts Are Achieving Expected Benefits

## What GAO Found

DOD program offices could not demonstrate that they have achieved cost savings or performance improvements through the use of performance-based logistics arrangements. Although DOD guidance on implementing these arrangements states program offices should update their business case analysis based on actual cost and performance data, only 1 of the 15 program offices included in GAO's review had performed such an update consistent with DOD guidance. In the single case where the program office had updated its business case analysis, it determined that the performance-based logistics contract did not result in expected cost savings and the weapon system did not meet established performance requirements. In general, program offices had not updated their business case analysis after entering into a performance-based logistics contract because they assumed that the costs for weapon system maintenance incurred under a fixed-price performance-based logistics contract would always be lower than costs under a more traditional contracting approach and because they lacked reliable cost and performance data needed to validate assumptions used. Furthermore, the Office of the Secretary of Defense has not established procedures to monitor program offices to ensure they follow guidance and update the business case analysis. Additionally, program officials said because of limitations in their own information systems, they typically relied on cost and performance data generated by the contractors' information systems to monitor performance-based logistics contracts. The program offices, however, had not determined whether contractor-provided data were sufficiently reliable to update their business case analysis. Although the Defense Contract Management Agency and the Defense Contract Audit Agency are most commonly used to monitor higher risk contracts, such as cost plus contracts, they are potential resources available to assist program offices in monitoring fixed-price performance-based contracts. In doing so, these DOD agencies have the capability to verify the reliability of contractors' information systems and collect cost and performance data needed to update their business case analysis. Until program offices follow DOD's guidance and update their business case analysis based on reliable cost and performance data, DOD cannot evaluate the extent to which performance-based logistics arrangements are achieving expected benefits and being effectively implemented within DOD.

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United States Government Accountability Office  
Washington, D.C. 20548

September 9, 2005

The Honorable John Ensign  
Chairman  
The Honorable Daniel K. Akaka  
Ranking Minority Member  
Subcommittee on Readiness and Management Support  
Committee on Armed Services  
United States Senate

The Department of Defense (DOD) reported that it spent \$23.6 billion in fiscal year 2004 for depot maintenance of military weapon systems.<sup>1</sup> Almost half of those expenditures were paid to private sector companies to perform depot maintenance activities for selected weapon systems. DOD's preferred approach for providing long-term total system support for weapon systems is a concept it calls performance-based logistics. Performance-based logistics is a variation of other contractor logistics support strategies and involves defining a level of performance that the weapon system is to achieve over a period of time at a fixed cost to the government.<sup>2</sup> Specific performance measures are established in each contract. DOD believes this contracting strategy for supporting weapon systems and components will achieve higher levels of performance while minimizing costs. For example, DOD has claimed millions of dollars in cost savings and significant performance improvements in such areas as material availability and logistics response time through the use of performance-based logistics. As a result of aggressively pursuing this contracting strategy, DOD expected an increasing number of weapon systems and components to be maintained for the military services by private sector companies under long-term, fixed-price, performance-based contracts. To justify the use of a performance-based logistics strategy, according to DOD guidance, program offices should conduct a business case analysis prior to adopting this approach. Following implementation of a performance-based logistics contract, program offices should update their business case analysis to validate the assumptions used based on

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<sup>1</sup>Depot maintenance encompasses materiel maintenance or repair requiring the overhauling, upgrading, or rebuilding of parts, assemblies, or subassemblies and the testing and reclamation of equipment.

<sup>2</sup>Performance-based logistics arrangements for weapon system support can include either a contract with a private sector company or an arrangement to use a government facility.

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actual cost and performance data and to support future weapon systems plans.

As requested, we reviewed DOD's implementation of performance-based logistics arrangements. Our objective was to determine whether DOD could demonstrate cost savings or improved responsiveness through the use of performance-based logistics arrangements. This is the second of two reports addressing DOD's implementation of performance-based logistics. In an August 2004 report,<sup>3</sup> we identified the types of contractor logistics support arrangements the private sector used when outsourcing the maintenance of complex and costly equipment with life-cycle management issues similar to those of military systems. We also identified several lessons learned from comparisons between private sector contractor support practices and the performance-based logistics approach that DOD was urging the services to use. That report recommended that DOD incorporate into guidance the private sector's practice of using performance-based contracts to achieve economies at the component level, rather than as a preferred practice at the platform level. DOD issued policy memoranda and revised its guidebook to implement our recommendation.

As part of our current review, we collected and analyzed data on 15 weapon system programs that were among those identified by the Office of the Secretary of Defense and the military services as programs that have successfully used performance-based logistics arrangements. We selected weapon system programs that were sufficiently mature to provide lessons learned on the use of performance-based logistics. We reviewed contracts and related files and interviewed program officials to determine how these arrangements were structured and managed. We examined business case analysis documents prepared by the program offices to justify the use of a performance-based logistics strategy. We discussed with program officials the systems they used to monitor contractor cost and performance. We also reviewed DOD policies, procedures, and guidance related to the use of performance-based logistics for weapon system support. We determined that the data used were sufficiently reliable for our purposes. We performed our work from August 2004 through June 2005 in accordance with generally accepted government auditing standards. The Scope and

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<sup>3</sup>GAO, *Defense Management: Opportunities to Enhance the Implementation of Performance-Based Logistics*, [GAO-04-715](#) (Washington, D.C.: Aug. 16, 2004).

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Methodology section contains more detailed information about the work we performed.

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## Results in Brief

DOD program offices could not demonstrate that they have achieved cost savings or performance improvements through the use of performance-based logistics arrangements. Although DOD guidance on implementing these arrangements states program offices should update their business case analysis based on actual cost and performance data, only 1 of the 15 program offices included in our review had performed such an update consistent with DOD guidance. In the single case where the program office had updated its business case analysis, it determined that the performance-based logistics contract did not result in expected cost savings and the weapon system did not meet established performance requirements. In general, program offices had not updated their business case analysis after entering into a performance-based logistics contract because they assumed that the costs for weapon system maintenance incurred under a fixed-price, performance-based logistics contract would always be lower than costs under a more traditional contracting approach and because they lacked reliable cost and performance data needed to validate assumptions used. Furthermore, the Office of the Secretary of Defense has not established procedures to monitor program offices to ensure they follow guidance and update the business case analysis. Additionally, program officials said because of limitations in their own information systems, they typically relied on cost and performance data generated by the contractors' information systems to monitor performance-based logistics contracts. The program offices, however, had not determined whether the contractor-provided data were sufficiently reliable to update their business case analysis. Although the Defense Contract Management Agency (DCMA) and the Defense Contract Audit Agency (DCAA) are most commonly used to monitor higher risk contracts, such as cost plus contracts, they are potential resources available to assist program offices in monitoring fixed-price performance-based contracts. In doing so, these DOD agencies have the capability to verify the reliability of contractors' information systems and collect cost and performance data needed to update the business case analysis. Until program offices follow DOD's guidance and update their business case analysis based on reliable cost and performance data, DOD cannot evaluate the extent to which performance-based logistics arrangements are achieving expected benefits and being effectively implemented within DOD.

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This report contains recommendations aimed at ensuring that DOD program offices follow DOD guidance for updating their business case analyses and verify the reliability of contractor cost and performance data. In commenting on a draft of this report, DOD concurred with our findings and recommendations. DOD's response is included in appendix I.

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## Background

DOD has increasingly relied on contractors to provide logistics support for weapon system maintenance. These logistics support arrangements have taken various forms. In fiscal year 1998, DOD directed the armed services to pursue logistics support "reengineering" efforts with contractors to achieve cost savings and improve efficiency.<sup>4</sup> A 1999 DOD study identified 30 pilot programs to test logistics support concepts that placed greater reliance on the private sector. Some of the pilot programs involved performance-type arrangements that were subsequently converted to, or designated as, performance-based logistics contracts.<sup>5</sup> DOD's *Quadrennial Defense Review Report*<sup>6</sup> advocated the implementation of performance-based logistics, with appropriate metrics, to compress the supply chain<sup>7</sup> by removing steps in the warehousing, distribution, and order fulfillment processes; reducing inventories; and reducing overhead costs while improving the readiness of major weapon systems and commodities.

Over the last few years, DOD has issued guidance on the implementation of performance-based logistics. In November 2001, the Office of the Deputy Under Secretary of Defense issued guidance recommending that program managers conduct a sound business case analysis to decide whether they

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<sup>4</sup>Reengineering was the term DOD used to describe its efforts to increase the cost-effectiveness of its weapon systems throughout their life cycles by ensuring that support infrastructures were competitive, timely, and efficient.

<sup>5</sup>Examples of these logistics support arrangements include (1) contractor logistics support, where the contractor provided most or all elements of logistics support, including depot maintenance; (2) total system performance responsibility, under which the contractor assumed responsibility for the weapon system's life-cycle management; and (3) total system sustainment responsibility or total system support responsibility, which gave the contractor responsibility for all contracted sustainment actions including parts management and depot-level repair.

<sup>6</sup>DOD, *Quadrennial Defense Review Report*, (Washington, D.C.: Sept. 30, 2001).

<sup>7</sup>Supply chain management refers to all of the interrelated components and processes required to ensure that the correct amount of product is in the correct location at the right time and at the lowest cost.



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should implement performance-based logistics for new systems and major acquisitions for already fielded systems.<sup>8</sup> In an August 2003 memorandum to the military departments, the Under Secretary of Defense (Acquisition, Technology and Logistics) stated that DOD should continue to increase its use of performance-based logistics acquisitions. On February 4, 2004, the Deputy Secretary of Defense (1) directed the Under Secretary of Defense (Acquisition, Technology and Logistics), in conjunction with the Under Secretary of Defense (Comptroller), to issue clear guidance on purchasing logistics support using performance criteria and (2) directed each service to provide a plan to aggressively implement performance-based logistics for current and planned weapon system platforms. Then, based on recommendations in our August 2004 report,<sup>9</sup> the Under Secretary of Defense (Acquisition, Technology and Logistics) issued a memorandum reemphasizing that the use of this type of support strategy was intended to optimize weapon system availability while minimizing costs and the logistics footprint<sup>10</sup> and may be applied to weapon systems, subsystems, and components. The memorandum also provided specific definitions of performance metrics to be used.

DOD describes performance-based logistics as the process of

- (1) identifying a level of performance required by the warfighter and
- (2) negotiating a performance-based arrangement between the government and a contractor or government facility to provide long-term total system support for a weapon system at a fixed level of annual funding. Instead of buying spare parts, repairs, tools, and data in individual transactions, DOD program offices that use a performance-based logistics arrangement buy a predetermined level of performance that meets the warfighter's objectives. Although established performance measures should be tailored to reflect the unique circumstances of each performance-based logistics arrangement, the measures are expected to support five general objectives: (1) percentage of time that a weapon system is available for a mission (operational availability); (2) percentage of mission objectives met (operational reliability); (3) operating costs divided by a specified unit of

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<sup>8</sup>DOD, *Product Support for the 21<sup>st</sup> Century: A Program Manager's Guide to Buying Performance* (Washington, D.C.: Nov. 6, 2001).

<sup>9</sup>[GAO-04-715](#).

<sup>10</sup>The logistics footprint refers to the size or presence of the government or contractor personnel, equipment, inventory, facilities, transportation assets, or real estate needed to deploy, sustain, and move the weapon systems or components.

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measure (cost per unit usage); (4) size or presence of support required to deploy, sustain, or move a weapon system (logistics footprint); and (5) period of time that is acceptable between the demand or request for support and the satisfactory fulfillment of that request (logistics response time). Currently, a DOD task force is refining these objectives into DOD standard performance definitions to be used by program offices in every service when preparing performance-based logistics arrangements.

DOD guidance recommends that program offices prepare a business case analysis prior to adopting a performance-based logistics approach to support a weapon system.<sup>11</sup> The aim of the business case analysis is to justify the decision to enter into a performance-based logistics contract. The business case analysis is to include cost savings that are projected as a result of using a performance-based logistics approach and the assumptions used in developing the business case analysis. Furthermore, DOD guidance states that program offices should update their business case analyses at appropriate decision points when sufficient cost and performance data have been collected to validate the assumptions used in developing the business case analyses, including the costs of alternative approaches, projected cost savings, and expected performance levels. Further, GAO Internal Control Standards state that it is necessary to periodically review and validate the propriety and integrity of program performance measures and indicators. Also, actual performance data should be continually compared against expected or planned goals, and any difference should be analyzed. Additionally, management should have a monitoring strategy that emphasizes to program managers their responsibility for internal controls (i.e., to review and validate performance measures and indicators) and that includes a plan for periodic evaluation of control activities.

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<sup>11</sup>DOD, *Performance-Based Logistics: A Program Manager's Product Support Guide* (Washington, D.C.: Sept. 30, 2004); *Product Support Strategy (PSS) Business Case Analysis (BCA) Guiding Principles*, (Washington, D.C.: Jan. 23, 2004); and *Business Case Development Guide* (Washington, D.C.).

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## DOD Program Offices Could Not Demonstrate Cost Savings and Performance Improvement Resulting from the Use of Performance-Based Logistics

DOD program offices could not demonstrate that their use of performance-based logistics arrangements had achieved cost savings and performance improvements because they had not updated their business case analysis as suggested by DOD guidance. Specifically, of the 15 DOD program offices, only 1 updated its business case analysis to validate assumptions concerning cost and performance. Other DOD program offices had not updated their business case analysis in part because they lacked reliable contractor cost and performance data. The program offices typically relied on cost and performance data generated by contractors' information systems without verifying that the data were sufficiently reliable to update the business case analysis. Two DOD agencies, DCMA and DCAA, have the capability to assist program offices in monitoring fixed-price performance-based contracts, verifying the reliability of contractors' information systems, and collecting cost and performance data.

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## Projected Cost Savings and Performance Improvements Were Not Validated

None of the 15 program offices included in our review could demonstrate that use of a performance-based logistics arrangement had achieved cost savings and performance improvements. Although an updated business case analysis based on actual cost and performance data might show that cost savings and performance improvements were being achieved, only 1 of the 15 program offices had updated its business case analysis consistent with DOD guidance. Of the 15 program offices, 11 had developed a business case analysis prior to entering into a performance-based logistics arrangement.<sup>12</sup> In their analysis, these program offices projected that they would achieve significant cost savings. For example, an

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<sup>12</sup>Four of the 15 program offices we reviewed had not prepared a business case analysis. Officials at two program offices stated that their contracting arrangements did not meet the existing definition of a performance-based logistics contract and, therefore, the requirement to conduct a business case analysis was not applicable. Subsequently, the Under Secretary of Defense (Acquisition, Technology and Logistics) issued guidance on purchasing weapon systems logistics support using performance-based criteria and clarified the types of contract arrangements to be considered as performance-based logistics arrangements. DOD determined that under these clarified criteria, these two contracts meet the definition of a performance-based logistics contract. The other two program offices determined that they lacked sufficient cost and performance information necessary to prepare business case analyses. To collect baseline cost and performance data, they entered into cost-plus contracts rather than fixed-price contracts. On the basis of an assessment of baseline data collected in the course of the cost-plus contracts, the program offices expect to determine at a later time if it would be advantageous to transition from the cost-plus contract to fixed-price performance-based logistics arrangements. Before doing so, they would prepare a business case analysis as suggested under DOD guidance.

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Army program office projected total cost savings of \$508.5 million, and a Navy program office projected cost savings of \$29.7 million. However, only the Navy's T-45 program office had subsequently updated its business case analysis consistent with DOD guidance to determine whether cost savings were being achieved.<sup>13</sup> Realizing that the contractor was not meeting the aircraft availability performance measure, the program office reassessed its business case assumptions and found that costs per flying hour were higher than estimated because the aircraft was flying fewer hours than forecasted. As a result, the program office negotiated separate contracts for the airframes and engines, which resulted in estimated cost savings of \$144 million over 5 years.

Performance indicators tracked by the program offices showed that the contractors met or exceeded performance requirements. Of the 15 programs, 10 reported that performance levels exceeded contract requirements, and 5 reported that performance levels were meeting contract requirements. For example, an Army program office reported a weapon system availability rate of 99 percent, which is 7 percent higher than what was projected in the business case analysis. Similarly, a Navy program office reported a weapon system availability rate of 97 percent, which is 7 percent higher than projected.

Despite the reported performance improvements, the program offices had not analyzed the performance data to validate the improvements and determine whether these improvements could be attributed directly to their use of performance-based logistics arrangements to support the weapon systems. In addition, we noted that program offices in the past reported they had also met or exceeded required levels of performance using other contractual arrangements for weapon system maintenance. Moreover, the DOD program offices reporting that performance levels were exceeding contract requirements under performance-based logistics arrangements had not determined the incremental costs associated with achieving these higher levels of performance. As a result, they had no way of knowing whether incremental costs outweighed the benefits derived from achieving performance levels in excess of requirements.

Program officials did not follow DOD guidance to update and validate their business case analyses because they assumed that costs incurred under

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<sup>13</sup>The T-45 Goshawk is a tandem-seat jet trainer aircraft used by the Navy and Marine Corps for training in carrier aviation and tactical strike missions.

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fixed-price performance-based logistics arrangements would always be lower than costs incurred under more traditional contracting arrangements, and several program officials cited a lack of reliable data needed to validate expected costs savings and improved performance. However, the experience of the T-45 program showed that it is possible for program offices to validate the assumptions in the business case analysis and to determine whether expected cost savings and performance improvements were achieved. There are also other benefits derived from validating the assumptions used in the business case analysis. Validation can provide a better understanding of costs associated with the repair and maintenance of weapon systems, ensure that proper performance metrics are in place to satisfy logistical demand, isolate incremental costs associated with achieving higher levels of performance, and make cost and performance data available for contract renegotiations in order to obtain the best value for the government. Furthermore, we did not find evidence that the Office of the Secretary of Defense had established procedures to monitor whether program offices were following its guidance to update their business case analyses. The results of these updates could be used by DOD to assess the implementation of performance-based logistics arrangements and evaluate the extent to which performance-based logistics arrangements are achieving expected benefits.

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**DOD Program Offices  
Relied on Contractors' Data  
Without Verifying the  
Reliability of the Data**

DOD program offices included in our review stated that because of limitations in their own information systems, they typically relied on cost and performance data generated by the contractors' information systems to monitor performance-based logistics contracts. Program offices acknowledged limitations in their own information systems in providing reliable data to closely monitor contractor cost and performance. Existing systems are capable of collecting some cost and performance information on performance-based logistics contracts; however, according to program officials, the systems are not capturing sufficiently detailed cost and performance information for monitoring performance-based logistics

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contracts.<sup>14</sup> Program officials told us they had more confidence in the accuracy and completeness of contractor systems than in their legacy systems. The program offices, however, had not determined whether the contractor-provided data were sufficiently reliable to update their business case analyses. As a result, the program offices did not have the reliable data they needed to validate the assumptions used in the business case analysis and to determine whether their performance-based logistics arrangements were achieving expected cost savings and improved performance.

As we noted in a prior report on DOD's management of depot maintenance contracting,<sup>15</sup> to reduce personnel and save costs, DOD decided to rely more on contractors to manage and oversee fixed-price contracts because these contracts are considered low risk. The contractor assumes most of the risks for fixed-priced contracts, with the government taking a more limited role in monitoring these contracts. In our prior work on defense contract management, we discussed the importance of monitoring contractors' systems to ensure the accuracy and completeness of information generated by these systems.<sup>16</sup> In addition, during our review of the private sector's use of performance-based logistics,<sup>17</sup> we noted that private-sector companies that use performance-based logistics contracts, whether fixed price or cost-plus, closely monitor cost and performance information to effectively manage their contracts. These companies said they rely on their own systems and personnel to verify the cost and quality of work performed by the contractor. The private sector takes this approach (1) to ensure that expected costs under the contracts are accurate and meet the company's reliability standards, (2) to validate the business case decision used to justify a performance-based logistics arrangement, and (3) to obtain the data necessary to renegotiate the contract.

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<sup>14</sup>In a previous report, we found that despite a significant investment in business systems, DOD continues to have long-standing financial and business management problems that preclude the department from producing reliable and timely information for making decisions. See GAO, *DOD Business System Modernization: Billions Being Invested without Adequate Oversight*, [GAO-05-381](#) (Washington, D.C.: April 29, 2005).

<sup>15</sup>GAO, *Defense Depot Maintenance: Contracting Approaches Should Address Workload Characteristics*, [GAO/NSIAD-98-130](#) (Washington, D.C.: June 15, 1998).

<sup>16</sup>GAO, *High Risk Series: Defense Contract Management*, [GAO/HR-97-4](#) (Washington, D.C.: Feb. 1997).

<sup>17</sup>See [GAO-04-715](#).

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## DOD Program Offices Made Limited Use of Resources Available to Assist in Monitoring Performance-Based Logistics Contracts

DCMA and DCAA have the capability to monitor contractor cost and performance, verify the reliability of contractor-provided data, and collect detailed cost and performance data. However, most of the DOD program offices we reviewed made limited use of these agencies' resources because they viewed fixed-price performance-based logistics contracts to be low risk compared with other types of contracts. Before a contract is awarded, DCMA can provide advice and service to help construct effective solicitations, identify potential risk, select the most capable contractors, and write contracts that meet the needs of DOD customers. After the contract is awarded, DCMA can monitor contractors' information systems to ensure that cost, performance, and delivery schedules are in compliance with the terms and conditions of the contracts. DCAA performs contract audits for DOD components and provides accounting and financial advisory services during contract negotiation and administration of contracts.

DCMA and DCAA officials said that they have a greater role in monitoring cost information for cost-plus contracts because such contracts are considered high risk. According to DCMA and DCAA officials, their level of oversight is significantly less for fixed-priced contracts, including performance-based logistics arrangements, because DOD considers these contracts to be low risk, thereby diminishing the need for monitoring contractor performance. Without a request from program offices or specific contract clauses, DCMA and DCAA generally would not conduct periodic reviews or audits of fixed-price contracts to verify cost and performance information. DCMA and DCAA officials also said that in the past, monitoring fixed-price contracts was included in their workload, but because of a reduction in staff and streamlining of operations, they focused their efforts on contract areas that have the highest risk for cost growth. DCMA and DCAA officials said they would support increasing their role in monitoring fixed-price performance-based contracts depending on the availability of their resources.

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## Conclusions

DOD is expanding its use of performance-based logistics as its preferred support strategy in support of weapon systems but has not yet demonstrated that this long-term support strategy is being effectively implemented DOD-wide. DOD guidance states that program offices, after entering into performance-based logistics arrangements, should update their original business case analysis using actual cost and performance data to validate their assumptions, but most of the program offices we

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reviewed had not followed this guidance, and the Office of the Secretary of Defense was not monitoring whether program offices were following the guidance. The program offices therefore could not substantiate that cost savings and performance improvements for weapon system support were being achieved through the use of performance-based logistics arrangements. Program offices also have lacked reliable cost and performance data needed to validate the results of performance-based logistics arrangements. Reliable data could be collected and analyzed by increasing oversight of these contracts with the assistance of DCMA and DCAA.

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## Recommendations for Executive Action

To demonstrate that performance-based logistics arrangements are resulting in reduced costs and increased performance, and to improve oversight of performance-based logistics contracts, we recommend that the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology and Logistics) to take the following two actions:

1. Reaffirm DOD guidance that program offices update their business case analyses following implementation of a performance-based logistics arrangement and develop procedures, in conjunction with the military services, to track whether program offices that enter into these arrangements validate their business case decisions consistent with DOD guidance.
2. Direct program offices to improve their monitoring of performance-based logistics arrangements by verifying the reliability of contractor cost and performance data. The program offices may wish to increase the role of DCMA and DCAA in overseeing performance-based logistics contracts.

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## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD concurred with our recommendations regarding the validation of business case decisions for performance-based logistics arrangements and verification of reliability of contractor data. While DOD was generally responsive to our recommendations, specific details on how DOD planned to validate and verify contractor data were not provided.

Regarding our recommendation to reaffirm guidance and develop procedures to track whether program offices validate their business case



decisions, DOD stated that the department will reaffirm DOD guidance on updating the business case analysis after implementing performance-based logistics arrangements and will work with the military services to develop procedures to track whether program offices validate their business case decisions consistent with DOD guidance.

With regard to our second recommendation to direct program offices to verify the reliability of contractor cost and performance data, DOD stated that it will issue guidance on verifying the reliability of contractor cost and performance data. DOD did not provide specific information on what the guidance would include nor did it indicate whether it would increase the use of DCMA or DCAA to verify the reliability of contractor cost and performance data.

DOD also provided technical comments, which we have incorporated as appropriate.

## Scope and Methodology

To determine whether DOD could demonstrate that cost savings and improved performance were being achieved through the use of performance-based logistics arrangements, we collected and analyzed data on 15 weapon system programs identified by the Office of the Secretary of Defense and the military services as programs that have successfully used performance-based logistics arrangements. The 15 programs are listed in table 1.

**Table 1: Performance-Based Logistics Programs Included in Our Review**

<b>Military service</b>	<b>Weapon system or component</b>	<b>Program office</b>
Air Force	C-17	Air Force Materiel Command
Air Force	F-117	Air Force Materiel Command
Air Force	JSTARS	Warner Robins Air Logistics Center
Air Force	C-130J	Air Force Materiel Command
Navy	ALR-67 (V3)	Naval Supply Systems Command
Navy	Auxiliary Power Units	Naval Supply Systems Command and Naval Air Systems Command
Navy	F-18 E/F FIRST	Naval Supply Systems Command and Naval Air Systems Command
Navy	F-404	Naval Supply Systems Command and Naval Air Systems Command
Navy	T-45 engines	Naval Supply Systems Command and Naval Air Systems Command

(Continued From Previous Page)

<b>Military service</b>	<b>Weapon system or component</b>	<b>Program office</b>
Navy	V-22 engines <sup>a</sup>	Naval Air Systems Command
Navy/Marine Corps	KC-130J <sup>b</sup>	Naval Supply Systems Command and Naval Air Systems Command
Army	HIMARS	Aviation and Missile Command
Army	Javelin CLU	Aviation and Missile Command
Army	TOW-ITAS	Aviation and Missile Command
Army	TUAV Shadow	Aviation and Missile Command

Source: GAO analysis of services' data.

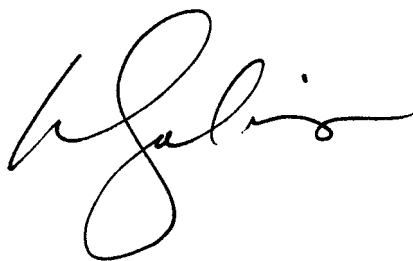
<sup>a</sup> This is a joint contract with the Navy and Marine Corps.

<sup>b</sup> The Marine Corps' maintenance contracting was handled by a Navy team.

We reviewed DOD and service policies, procedures, and guidance related to the use of performance-based logistics and met with program officials to discuss how their performance-based logistics contracts were structured and managed and how these contracts were validated to ensure that cost savings and improved performance were being achieved as a result of using performance-based logistics. We also obtained and analyzed available documentation, including business case analyses, contracts, and related files. We did not assess the methodology program offices used to prepare their business case analyses or the quality of these analyses. We discussed with program officials the systems they used to monitor contractor cost and performance. We also interviewed officials from the Office of the Secretary of Defense and military department headquarters to discuss implementation of performance-based logistics, lessons learned, and the benefits derived from using performance-based logistics approaches and practices. To determine how private-sector companies ensure that cost and performance levels under a performance-based contract are as expected, we reviewed the information provided by seven companies identified in our prior report that used complex and costly equipment that had life-cycle management issues similar to military weapon systems, and outsourced some portion of their maintenance work under performance-based contracts. These seven companies consisted of six airline companies and one mining company. We contacted officials at DCMA and DCAA to determine those agencies' roles in monitoring the costs and performance of fixed-priced contracts, including performance-based logistics contracts, how audits are requested or initiated, and the procedures for reporting the results of the audits.

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We are sending this report to the Chairman and Ranking Minority Member, Senate Subcommittee on Readiness and Management Support, Committee on Armed Services. We will also send copies to the Under Secretary of Defense (Acquisition, Technology and Logistics). Copies of this report will be made available to others upon request. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>. If you or your staff have any questions on the matters discussed in this report, please contact me at (202) 512-8412 or [solisw@gao.gov](mailto:solisw@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix II.

A handwritten signature in black ink, appearing to read 'W. Solis', with a large, stylized loop at the end.

William M. Solis  
Director, Defense Capabilities and Management

# Comments from the Department of Defense



DEPUTY UNDER SECRETARY OF DEFENSE FOR  
LOGISTICS AND MATERIEL READINESS  
3500 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3500

August 30, 2005

Mr. William M. Solis  
Director, Defense Capabilities and Management  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Mr. Solis:

This is the Department of Defense (DoD) response to the GAO draft report, "DEFENSE MANAGEMENT: DoD Needs to Demonstrate That Performance-Based Logistics Contracts Are Achieving Expected Benefits," dated August 16, 2005, (GAO Code 350551/GAO-05-966).

The Department generally concurs with the report and concurs with the recommendations. Detailed comments on the GAO recommendations are provided in the attachment. The Department appreciates the opportunity to comment on the draft report.

Sincerely,

  
for  
Jack Bell



GAO DRAFT REPORT – DATED August 16, 2005  
GAO CODE 350551/GAO-05-966

" DEFENSE MANAGEMENT: DOD Needs to Demonstrate That Performance-Based  
Logistics Contracts Are Achieving Expected Benefits "

DEPARTMENT OF DEFENSE COMMENTS  
TO THE RECOMMENDATIONS

**RECOMMENDATION 1:** The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology and Logistics) to reaffirm DoD guidance that program offices update their business case analysis following implementation of a performance-based logistics arrangement and develop procedures, in conjunction with the military services, to track whether program offices that enter into these arrangements validate their business case decisions consistent with DoD guidance. (Pages 9 and 10/GAO Draft Report)

**DOD RESPONSE:** Concur. The Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) will reaffirm DoD guidance relating to updating of the business case analysis following implementation of a performance based logistics arrangement as well as work with the military departments to develop an appropriate method to track whether program offices validate their business case decisions consistent with DoD guidance.

**RECOMMENDATION 2:** The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology and Logistics) to direct program offices to improve their monitoring of performance-based logistics arrangements by verifying the reliability of contractor cost and performance data. The program offices may wish to increase the role of DCMA and DCAA in overseeing performance-based logistics contracts. (Page 10/GAO Draft Report)

**DOD RESPONSE:** Concur. The Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) will issue guidance on verifying the reliability of contractor cost and performance data.

# GAO Contact and Staff Acknowledgments

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## GAO Contact

William M. Solis (202) 512-8412 or [solisw@gao.gov](mailto:solisw@gao.gov).

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## Acknowledgments

In addition to the contact named above, Thomas Gosling, Assistant Director; Thom Barger; Judith Collins; Pamela Valentine; and Cheryl Weissman were major contributors to this report.

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